Response Under 37 C.F.R. § 1.116 Expedited Procedure Group Art Unit 2872

Application No. 10/070,298
Paper Dated: March 30, 2005
In Reply to USPTO Correspondence of December 30, 2004
Attorney Docket No. 4083-020383

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application. Please amend claims 1 and 18 as follows:

Listing of Claims

1. (Currently Amended) A pair of range binoculars which comprises:

a first observation optical system comprising a first optical member for forming an erecting image, a first objective optical system that together with said first optical member determines a first objective optical axis, and a first ocular optical system that determines together with said first optical member a first ocular optical axis;

a second observation optical system comprising a second optical member for forming an erecting image, said second member being placed parallel with said first optical member, a second objective optical system that determines together with said second optical member a second objective optical axis, and a second ocular optical system that determines together with said second optical member a second ocular optical axis;

a main case accommodating said first optical member, first objective optical system, and first ocular optical system, and said second objective optical system, wherein said first optical member, first objective optical system, first ocular optical system, and second objective optical system are fixed in said main case so that they do not move when pupil distance is adjusted;

an attached case accommodating said second ocular optical system and said second optical member, said attached case being placed on said main case so that said attached case turns round said second objective optical axis;

laser range-finding means accommodated in said main case; and

measured distance displaying means comprising LCD means for displaying a distance measured by said laser range-finding means, said LCD means being placed at a part off a light path formed by said first observation optical system, and a displaying optical system for Response Under 37 C.F.R. § 1.116 Expedited Procedure

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projecting the distance displayed by said LCD means on a reticle so that the distance is

shown at a rim of the visual field.

2. (Previously Presented) The range binoculars as claimed in claim 1, wherein said

displaying optical system comprises a relay lens and a reflecting mirror.

3. (Original) The range binoculars as claimed in claim 1, wherein said laser range-finding

means comprises a laser emitter for emitting a laser beam to an object, a laser beam receiver

for receiving the laser beam reflected by the object, and range-finding means for measuring

the distance between the binoculars and said object based on the length of time from the

emission of said laser beam to the receiving thereof.

4. (Original) The range binoculars as claimed in claim 3, wherein said laser emitter

comprises a laser diode emitting an infrared ray, and a plate beam splitter or prism beam

splitter placed on the second objective optical axis, said splitter reflecting the infrared ray

emitted by the laser diode, whereby the infrared ray is sent to said object through the second

objective optical system, and said splitter transmitting visible light incoming through the

second objective optical system.

5. (Original) The range binoculars as claimed in claim 1, wherein said first optical member

is a beam splitter that separates infrared ray from visible light and takes the separated infrared

ray out of the light path of said first observation optical system.

6. (Original) The range binoculars as claimed in claim 5, wherein said laser beam receiver

receives an infrared ray that was emitted by the laser emitter to an object, reflected by said

object, sent into the light path of said first observation optical system, and separated by said

first optical member.

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7. (Previously Presented) The range binoculars as claimed in claim 4, wherein said laser

diode and said laser beam receiver are placed at a part off a light path formed by said first

observation optical system and in the opposite side of the second observation optical system.

8. (Previously Presented) The range binoculars as claimed in claim 7, wherein said laser

diode is placed in the vicinity of a wall of said main case by the side of said first observation

optical system, whereby said laser diode emits said infrared ray toward said plate beam

splitter or prism beam splitter perpendicularly to the optical axes of said first and second

observation optical systems.

9. (Previously Presented) The range binoculars as claimed in claim 4, wherein said plate

beam splitter or prism beam splitter is placed between said second objective optical system

and said second optical member.

10. (Previously Presented) The range binoculars as claimed in claim 8, wherein said plate

beam splitter or prism beam splitter is placed between said second objective optical system

and said second optical member.

11. (Previously Presented) The range binoculars as claimed in claim 5, wherein said beam

splitter transmits infrared ray and reflects visible light.

12. (Previously Presented) The range binoculars as claimed in claim 6, wherein said beam

splitter transmits infrared ray and reflects visible light.

13. (Previously Presented) The range binoculars as claimed in claim 2, wherein said

reflecting mirror is placed at around a rim of the visual field so that said reflecting mirror

does not substantially obstruct said light path.

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14. (Previously Presented) The range binoculars as claimed in claim 2, wherein said measured distance displaying means is placed in close proximity to said reticle and above the optical axis of the first ocular optical system.

15. (Previously Presented) The range binoculars as claimed in claim 13, wherein said measured distance displaying means is placed in close proximity to said reticle and above the optical axis of the first ocular optical system.

16. (Previously Presented) The range binoculars as claimed in claim 14, wherein said LCD means is positioned so that the displaying face of said LCD means is vertical to the focusing face of said reticle.

17. (Previously Presented) The range binoculars as claimed in claim 15, wherein said LCD means is positioned so that the displaying face of said LCD means is vertical to the focusing face of said reticle.

18. (Currently Amended) The range binoculars as claimed in claim—17_1, wherein said displaying optical system consists of one relay lens and one reflecting mirror.